AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1. (Currently amended) A method for generating an output signal locked to an input signal, the method comprising:

receiving at a detector the input signal and a reference signal;

generating a detector output signal indicative of a difference between the input signal and the reference signal;

receiving the detector output signal at a first filter coupled to the detector and providing a filtered detector output signal;

receiving the filtered detector output signal at a transconductance (gm) amplifier coupled to the first filter and providing a current output signal;

receiving the current output signal at a multiplexer configured to provide, based on a mode control signal, only one of the current output signal received from the gm amplifier or a signal received from another device;

receiving the current output signal at a second filter coupled to the ~~gm amplifier~~ multiplexer and providing a control signal; and

receiving at an oscillator coupled to the second filter the control signal and providing an oscillator signal having a property that is adjusted by the control signal.

2. (Original) The method of claim 1, wherein the first filter is a single-pole RC filter.

3. (Previously presented) The method of claim 1 further comprising:

receiving at a frequency divider coupled to the oscillator the oscillator signal and dividing the oscillator signal for generating the reference signal.

4. (Original) The method of claim 1, wherein the input signal is a serial data stream.

5. (Original) The method of claim 4, wherein the serial data stream has a data rate of at least 2.488 GHz.

6. (Original) The method of claim 1, wherein the gm amplifier includes a differential amplifier receiving the filtered signal and a current load circuit coupled to the differential amplifier providing the current output signal.

7. (Original) The method of claim 1, wherein the detector output signal has a peak-to-peak signal swing of less than one volt.

8. (Original) The method of claim 1, wherein the reference signal is a reference clock signal.